



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/688,932	10/21/2003	Mamoru Miyashita	Q78105	3172
23373 7590 06/25/2007 SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			EXAMINER TRAN, NHAN T	
			ART UNIT 2622	PAPER NUMBER
			MAIL DATE 06/25/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/688,932	Applicant(s) MIYASHITA, MAMORU	
	Examiner Nhan T. Tran	Art Unit 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| <p>1) <input type="checkbox"/> Notice of References Cited (PTO-892)</p> <p>2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</p> <p>3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.</p> | <p>4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.</p> <p>5) <input type="checkbox"/> Notice of Informal Patent Application</p> <p>6) <input type="checkbox"/> Other: _____.</p> |
|---|--|

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 4/11/2007 have been fully considered but they are not persuasive.

The Applicant asserts that Nagai discloses a zoom operation, but does not disclose the zooming occurring while the release button is continuously held down as in the present invention (remarks, pages 8-9).

In response, the Examiner understands the Applicant's arguments but respectfully disagrees. Since the review mode is activated and remains ON by holding down the release shutter button (20) in Mitsuhashi after the image was captured (see Mitsuhashi, col. 6, line 58 – col. 7, line 6), Nagai is not relied upon for this feature in the combination of Mitsuhashi and Nagai. Instead, Nagai is relied upon for the teaching of electronic zoom during the review mode to compensate the lack of teaching for an electronic zoom feature in Mitsuhashi (see Nagai, Figs. 2a & 2b, paragraphs [0048]-[0050]). It is clear in Mitsuhashi that when the user keeps pressing the shutter button for a predetermined time, the camera operates in the review mode and displays the last captured image until the user stops pressing the shutter button. In the reference to Nagai, the electronic zoom is enabled during the review mode to provide detailed view of an object so as to allow the user to easily review the displayed image (Nagai, paragraph [0006]). Thus, the combined teachings of Mitsuhashi and Nagai have reasonably met all limitations of the claims 1-14 (see previous office action).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mitsuhashi et al. (US 6,184,930 B1) in view of Nagai (US 2001/0010561 A1).

Regarding claim 1, Mitsuhashi et al. (hereafter, referred as "Mitsuhashi") discloses a digital camera (digital still camera shown in Fig. 1; col. 4, lines 34-56 and col. 5, line 29, wherein the camera operates in a digital mode by converting analog signals into signals of a digital format by A/D converter) comprising:

an image capture section (CCD 13) which captures a subject and generates a captured image (Fig. 1 and col. 5, lines 7-13);

a display section (LCD display 14) which displays the captured image (Fig. 1 and col. 5, lines 13-16);

an instruction section (shutter button 20) including an instruction switch (two-level switch of the shutter button), which issues an image capture instruction (the button is pushed to a second level) to the image capture section when the instruction switch is in an ON state (see col. 5, lines 48-59);

a control section (control unit 15 in combination with reproduction circuit 18) which, if the ON state of the instruction section is continually detected after the image capture instruction, controls such that the captured image is displayed at the display section during the ON state (see Fig. 2; col. 5, lines 60-67; col. 6, line 58 – col. 7, line 6 and col. 7, lines 21-27, and note that **an ON state of the shutter button 20** is represented by either or both first pushed level and second pushed level of the shutter button, wherein the camera switches to a **review mode** for displaying the captured image when the shutter button 20 is continuously pushed to the first level).

Although Mitsuhashi teaches that the camera switches to the review mode for displaying the captured image when the shutter button is maintained pushed at the first level, Mitsuhashi does not explicitly teach an input section which administers instructions relating to image display and if an instruction is issued by the input section during the ON state, the control section controls a change of size of a display object region of the captured image that is to be displayed at the display section.

However, as taught by Nagai, a digital still camera (Fig. 1) is capable of performing electronic zoom of captured image on a display device in a review mode (reproduction mode). Nagai teaches an input section (10) that comprises a zoom switch which administers instructions (zoom instructions) relating to image display for changing size (i.e., zooming in or enlarging) of display object region (Figs. 2a & 2b, region A2 being selected for enlarging) of the captured image that is to be displayed at the display section if a zoom instruction is issued by the input instruction **during an ON state of the review mode** (Fig. 5, steps 34-38 and paragraphs [0048]-[0050]). Such electronic

Art Unit: 2622

zoom function in a review mode allows the user to easily view details of a target object in an enlarge format as suggested by Nagai in paragraph [0006].

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Mitsuhashi and Nagai to arrive at the applicant's claimed invention by modifying the digital camera in Mitsuhashi to include an electronic zoom input section for inputting instructions to the control section so as to change size of a display object region of the captured image that is to be displayed at the display section during the ON state of the review mode (shutter button 20 of Mitsuhashi maintained ON). Doing this would allow the user to easily view details of a target object in an enlarge format for checking image quality during reviewing the captured image as taught by Nagai above.

Regarding claim 2, Mitsuhashi in view of Nagai as analyzed in claim 1 discloses the control section comprises a display control section (circuit 18 and steps S04-S10) which controls such that the captured image is displayed at the display section during the ON state (see Mitsuhashi; col. 5, lines 34-40; col. 6, line 63 – col. 7, line 6 and col. 8, lines 6-13); and a region control section (a zoom changeover switch 10 in Fig. 1 of Nagai) which, when the instruction is issued by the input section during the ON state of the instruction section, controls the change of the size of the display object region of the captured image that is to be displayed at the display section (see Nagai, paragraphs [0049]-[0050] and [0041]).

Regarding claim 3, Mitsuhashi in view of Nagai as analyzed in claim 2 further discloses that the region control section comprises a position control section (indicated by arrow C1 and region A2 shown in Fig. 2a) which changes position of the display object region in accordance with the instruction from the input section (see Nagai, paragraphs [0049]-[0050] in which the user can change the position of the display object region to be zoomed by moving the arrow C1 to a desired region).

Regarding claims 4 & 5, Mitsuhashi also discloses that the control section comprises detection section (control unit 15) which detects the duration of the ON state of the shutter button (see Mitsuhashi, Fig. 2, steps S03-S06 and S04-S10 and col. 6, line 62 – col. 8, line 13).

Regarding claim 6, Mitsuhashi clearly discloses that the instruction section comprises a release switch (shutter button 20, col. 5, lines 48-67).

Regarding claim 7, Mitsuhashi discloses an image capture device (a digital camera shown in Fig. 1; col. 4, lines 30-56 and col. 5, lines 24-34) comprising:

- an image capture section (CCD 13) which captures a subject and generates a captured image when an instruction (shutter button 20 is pushed to the second level) for image capture is received (Figs. 1 & 2; col. 5, lines 7-13 and col. 5, lines 48-67);

- a display section (LCD display 14) which displays the captured image generated by the image capture section (col. 5, lines 13-17);

an image display instruction section (shutter button 20) which issues an instruction (the shutter button is pushed to the first level) for display of the captured image at the display section (col. 5, lines 60-67 and col. 6, line 58 – col. 7, line 6);

a control section (control unit 15 in combination with reproduction circuit 18) which, if the instruction for display (shutter button is pushed to the first level) of the captured image from the image display instruction section is detected subsequent to the instruction for image capture to the image capture section, controls such that the captured image is displayed at the display section for as long as the instruction for display is detected (see col. 5, lines 48-67; col. 6, line 58 – col. 7, line 6 and col. 7, lines 21-27, wherein when the shutter button 20 is detected at the pushed position of the first level for a predetermined time, the camera **switches to a review mode** for displaying the captured image for as long as the shutter button is maintained pushed at the first level).

Although Mitsuhashi teaches that the camera switches to the review mode for displaying the captured image when the shutter button is maintained pushed at the first level, Mitsuhashi does not teach a region change instruction section which issues an instruction for change of a display object region of the captured image at the display section; and if the instruction for change of the display object region from the region change instruction section is issued while the instruction for display is detected, the control section controls so as to change the display object region of the captured image that is to be displayed at the display section in accordance with the instruction from the region change instruction section.

Nagai teaches a digital still camera (Fig. 1) that is capable of performing electronic zoom of captured image on a display device in a review mode (reproduction mode). Nagai teaches a region change instruction section (10) comprising an electronic zoom section which issues an instruction for change of a display object region (i.e., zooming in or enlarging) of display object region (Figs. 2a & 2b, region A2 being selected by arrow C1 for enlarging) of the captured image at the display section. As shown in Fig. 5, steps 34-38, paragraphs [0048]-[0050] in Nagai, if a zoom instruction is issued by the region change instruction section to change the display object region (A2) **during the review mode**, the display object region is changed (i.e., enlarged) on the display (Fig. 2b) under control of a control section (Fig. 1, CPU 7). Such electronic zoom function allows the user to easily view details of a target object in an enlarge format in the review mode as suggested by Nagai in paragraph [0006].

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Mitsuhashi and Nagai to arrive at the applicant's claimed invention by modifying the digital camera in Mitsuhashi to include a region change instruction section (an electronic zoom section) for issuing instructions for a change (zooming in or enlarging) of a display object region of the captured image at the display section and the control section controls to change the display object region of the captured image that is to be displayed at the display section in accordance with the instruction from the region change instruction section during the ON state of the review mode (shutter button 20 of Mitsuhashi maintained ON). Doing this would allow the user to easily view details of a target object region in an enlarge

Art Unit: 2622

format for checking image quality during reviewing the captured image as taught by Nagai above.

Regarding claim 8, Mitsuhashi discloses a detection section (control unit 15) which detects whether or not the image display instruction section is issuing the instruction (the shutter button 20 is pushed to the first level) for display of the captured image (see Mitsuhashi, col. 6, line 62 – col. 7, line 6).

Regarding claim 9, as clearly disclosed by Mitsuhashi in col. 5, lines 48-67 and col. 6, line 58 – col. 7, line 6, the image display instruction section comprises an image capture button (shutter button 20) which issues the instruction for image capture by the image capture section (the shutter button 20 is pushed to the second level) and which, after the instruction for image capture, issues the instruction for display of the captured image (the shutter button is pushed to the first level) for as long as a state of the image capture button at the time of the instruction for image capture is maintained.

Regarding claim 10, Mitsuhashi in view of Nagai as analyzed in claim 7 also discloses the control section controls so as to change *at least one of* size of the display object region (by enlarging the object region as shown in Figs. 2a & 2b of Nagai) of the captured image and position of the display object region (by moving arrow C1 to select a display object region) in accordance with the instruction from the region change instruction section (see Nagai, paragraphs [0049]-[0050]).

Regarding claim 11, Mitsuhashi in view of Nagai as analyzed in claim 7 further discloses that the region change instruction section issues an instruction for a change of the display object region of the captured image by selecting one (i.e., region A2 shown in Fig. 2a) from a plurality of pre-specified regions (i.e., regions A1 and A2) of the captured image. See Nagai, Figs. 2a & 2b and paragraphs [0049]-[0050].

Regarding claim 12, this method claim is also met by the combined teachings of Mitsuhashi and Nagai as analyzed in claim 7.

Regarding claims 13 & 14, these method claims are also met by the combined teachings of Mitsuhashi and Nagai as analyzed in claims 8 & 10, respectively.

Regarding claim 15, the limitations of this claim are also met by the analysis of claim 1 in which the review mode is ON when the shutter button 20 is continuously pushed and the displayed image is then zoomed during this mode.

Regarding claim 16, the limitations of this claim are also met by the analyses of claims 7 & 15.

Regarding claim 17, it is clear in Mitsuhashi that the image capture instruction relates to a condition of shutter release (see claim 1).

Regarding claim 18, as disclosed by Mitsuhashi in col. 6, lines 20-25 and col. 7, lines 7-12, the display section displays a through image when the image capture instruction is not issued.

Conclusion

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

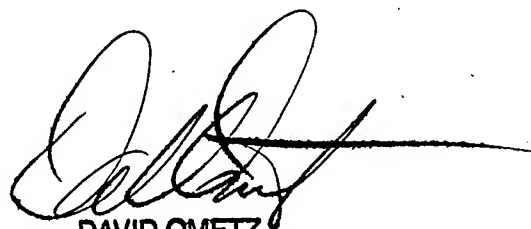
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nhan T. Tran whose telephone number is (571) 272-7371. The examiner can normally be reached on Monday - Friday, 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2622

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NHAN T. TRAN
Patent Examiner

A handwritten signature in black ink, appearing to read 'David Ometz', with a long horizontal line extending to the right.

DAVID OMETZ
SUPERVISORY PATENT EXAMINER